



Africa Regional Scholarship and Innovation Fund for Applied Sciences, Engineering and Technology

Progress Report to the PASET EB 1st January-30th June 2021

Executive Summary

Initiated and owned by African governments and implemented by *icipe*, the Regional Scholarship and Innovation Fund (RSIF) aims to build a critical mass of skills and knowledge needed to increase the use of science, technology, and innovation for sustainable economic growth in sub-Saharan Africa (SSA). This report provides achievements of the RSIF program for the period running from 1st January– 30th June 2021. A summary is included below:

- a) The total number of African contributing countries to RSIF remains eight viz. Benin, Burkina Faso, Côte d'Ivoire, Kenya, Ghana, Mozambique, Rwanda and Senegal. During this period, discussions were held with the Government of **Mozambique** and the World Bank office in Mozambique to agree on workplan for year 1 and process the Project first installment.
- b) *icipe* is in communication with the Government of Nigeria to finalise the Subsidiary Agreement (SA) between *icipe* and Nigeria, through which 21 of the already selected Cohort 3 Scholars are to be supported. The Scholarship agreements for these scholars will be finalised when the agreement has been executed.
- c) The Independent Review Committee for the selection of four additional African Host Universities (AHUs) to offer PhD programs in the PASET priority thematic areas met on 26 April to shortlist universities for further validation. On-site validation visits were completed by 24 June. It is expected that the selection of new PhD programs will be completed by 20 July and that contracts with new AHUs will be completed by 15 August 2021.
- d) Scholars are performing well academically and have remained motivated despite the COVID-19 challenges. 12 of the 15 **Cohort 1 scholars** are at their International Partner Institutes (IPIs) while two have not been able to physically join due to adjusted regulations in the IPIs caused by COVID-19. **Cohort 2 scholars** are settled in their AHUs. Some have already defended their proposals while others are in the final stages of proposal writing. Matching of Cohort 2 scholars to IPIs continues and so far 30 scholars have been matched and are to travel to the IPIs starting September 2021. **Cohort 3 scholars:** Scholars have begun reporting to their AHUs, with NM-AIST and University of Ghana being the first AHUs to receive Cohort 3 students. Agreements for 21 scholars to be funded through the government of Nigeria await signing of the SA between *icipe* and Nigeria.
- e) The 2nd Call for **RSIF Research and Innovation Grants** was published on March 26, 2021 and closed on June 6, 2021. 43 proposals were received in response to the Calls for proposals and the 34 eligible proposals are currently under review by independent experts. The Grants Independent Technical Committee will meet in August prior to submission of recommended proposal to the EB for awards.
- f) A program committee was established for **the RSIF Annual Conference** (scheduled for 15-19 November 2021 to be co-hosted by University Mohammed VI Polytechnic in Morocco). The Committee will support the conference program development among other tasks.
- g) The key challenge during the period continues to be the **impact of COVID-19** on the program, particularly the continuing restrictions on face-to-face courses, supervision and training at many universities and the inpredictability in regulations for travel and international mobility.

Summary of Request to the EB in this report

(1.1) RSIF Resource Mobilization and Permanent Fund design (page 4) The EB is requested to:

- Note that 21 scholar contracts cannot be concluded until the subsidiary agreement between icipe and the government of Nigeria is concluded. Discussion is underway with the government of Nigeria.
- Note the update on RSIF Permanent fund establishment.
- The EB is reminded to note the dates of the RSIF Annual Conference for 15-19 November, 2021 to be held both virtually and physically. An updated concept note, draft program, together with invitation letters will follow.

(2.2 & 2.3) Implementation status of Research Grants (Window 2, Type 1) and Selection of Cohort 3 PhD Scholars (page 9)

- The EB is requested to note progress of the RSIF PhD scholars and progress in implementation of the Research and Innovation grants. In particular, the EB is requested to note that 21 Scholar agreements await signature of Subsidiary agreement between Nigeria and *icipe*.

1.0 Introduction

The Regional Scholarship and Innovation Fund (RSIF) has been created to build a critical mass of skills and knowledge needed to increase the use of science, technology, and innovation for sustainable economic growth in sub-Saharan Africa (SSA). The report provides a summary of progress in the implementation of the RSIF Program for the period **1 Jan- 30 June 2021**. The report is presented along RSIF program component areas: viz, Component 1: Capacity Development for Operation of the Scholarship, Research, and Innovation Fund; and Component 2: PhD Scholarships, research grants and innovation grants.

Component 1: Capacity Development for Operation of the Scholarship, Research, and Innovation Fund

1.1 Capacity building for management of the RSIF General Fund and setting up the RSIF Permanent Fund:

The sub-component aims to strengthen the capacity of *icipe* as the RSIF Regional Coordination Unit (RCU) to engage in innovative fundraising strategies to reach funding partners relevant to the Fund and to design and operationalise the RSIF Permanent Fund. Key activities are described as part of resource mobilisation and establishment of the RSIF Permanent Fund.

1.1.1 Resource mobilization

During the period letters were drafted and shared with the Government of Uganda to follow up on their interest to participate in the PASET RSIF initiative. A meeting was held with the Director of Higher Education of the Ministry of Education and Sports (Dr. Jane Egau) to discuss this and agree on strategy for their engagement. Similar follow-up was done for Zambia, Tanzania and Malawi.

The total number of African contributing countries to RSIF remains eight (Benin, Burkina Faso, Côte d'Ivoire, Kenya, Ghana, Mozambique, Rwanda and Senegal). (**Mozambique**) The subsidiary agreement between *icipe* and the Government of Mozambique was received in this period. Discussions were held with the Government of Mozambique and the World Bank office in Mozambique to agree on workplan for year 1, as well as strengthening communication with the Government of Mozambique. Arrangements have also been made for receipt of the first installment (including preparation of Authorised signatory letters (ASLs).

Icipe is in communication with the Government of Nigeria to finalise the Subsidiary Agreement between *icipe* and Nigeria, through which 21 Cohort 3 Scholars are to be supported. The Scholar agreements for these scholars will be finalised when the agreement has been finalised.

A program committee was established for the RSIF Annual Conference (scheduled for 15-19 November 2021 to be co-hosted by University Mohammed VI Polytechnic in **Morocco**). The program committee comprises seven members including a representative of the CAG, the World Bank and thematic experts on the key conference areas including meeting the sustainable development goals, technology and Covid-19 challenges. The Annual Conference will be used both to showcase the high quality science that RSIF is implementing as well as to bring new partners on board.

1.1.2 Design of the RSIF Permanent Fund

icipe has developed a Terms of Reference (ToR) for the identification and recruitment of legal expertise to determine and establish the optimal legal entity for the RSIF permanent fund. The task will be implemented in close consultation with the RCU and PASET. The assignment includes, drafting RSIF Permanent fund legal registration documents and providing legal advisory support to the RCU. Once the Board of Directors have been recruited and can formally adopt the legal documentation, and upon

instructions from the RCU, the consultant will proceed to complete the legal registration. The consultancy will contribute to the advancement of RSIF's objective to establish a permanent fund. Specifically, the consultancy will support the RCU on all aspects of the legal documentation for the domicile and optimal entity selected.

Request to EB:

The EB is requested to:

- a) Note that 21 scholar contracts cannot be concluded until the subsidiary agreement between *icipe* and the government of Nigeria is concluded. Discussion is underway with the government of Nigeria.
- b) The EB is reminded to note the dates of the RSIF Annual Conference for 15-19 November, 2021 updated concept note together with invitation letters will follow.
- c) Note the concerns and clarifications highlighted by icipe on the RSIF Permanent Fund in letter to the World Bank, copied to the EB dated 4 June 2021.

1.2 Capacity development for the operation and management of doctoral training scholarships in selected AHUs

1.2.1 Selection of additional RSIF African Host Universities (AHUs)

A call for additional four PhD programmes to host RSIF PhD students at African universities was published and disseminated to existing AHUs and to ACEs in the four relevant RSIF themes, based on guidance from the EB. The call was open between 25 September to 23 November 2020. The desk reviews of 23 eligible applications by Independent Review Committees was completed on 9th April. The Independent Review Committees meetings to confirm review scores were completed by 23rd April 2021. The Independent Review Committee (IRC) met on 26th April to assess the IEC reviews and shortlisted 11 PhD programs at 10 universities. The IRC recommended that the PhD programs should be reviewed through an on-site evaluation by an independent reviewer as well as a virtual meeting with university leadership. On-site reviews were completed by 24th June. The virtual meetings with leadership will be completed by 16th July, and the final IEC meeting will be held on 20 July. The updated timeline for the selection of AHUs is given in Table 1 below.

Table 1. Timeline for the selection of AHUs

	Activity	Timeline
1	Independent Reviews: technical evaluation of applications by 12 thematic area experts (Independent Review [IRC] desk reviews)	9 April 2021
2	IRC meetings to confirm evaluation scores	23 April 2021
3	Virtual meeting of IEC to shortlist applications for validation (Independent Review Committee meetings)	26 April 2021
4	Validation of shortlisted applications (on-site evaluations)	24 June 2021
5	Validation of shortlisted applications (virtual meetings with shortlisted applicants)	18 July 2021
6	Virtual meeting of the IEC to make the final selection of PhD programs/African Host Universities	20 July 2021
7	EB approval	30 July 2021
8	Negotiations and signing of agreements between AHUs and icipe	15 August 2021

1.2.2 Information Communications and Technology

The procurement of video-conferencing equipment for RSIF AHUs was approached in two ways- a few universities directly procured (all have received equipment with exception of African University of Science and Technology which is in transit) while the rest received support from *icipe*. In the second group, all except Bayero University have now received their equipment. Equipment for Bayero University is on transit and will reach them by end of July 2021. University of Rwanda and Sokoine

University have received their Logitech e-conference platforms, and will receive, in the next period, mini-personal computers which were out of stock previously.

Management Information System (MIS) development for RSIF to support the automation of the scholarship and innovation components of the program continues. The system has been designed and developed, with User Acceptance Testing (UAT) expected to kick off at the beginning of July 2021. *Icipe* has also continued in the period to improve RSIF E-Systems including enhancement of data capture, and AgriDi application portal. The website is continiously updated.

1.3 Capacity development for improving the quality of PhD programs and research in ASET fields

1.3.1 Capacity Building Strategy and Implementation

icipe has continued during the period with the implementation of the RSIF Capacity Building Strategy to enhance the quality of PhD training at AHUs.

1.3.1.1 RSIF Guest Webinar Series

Four monthly guest webinars were held during the reporting period:

- (1) Dr Chrysantus Tanga, Research Scientist, Insects for Food and Feed (INSEFF) programme, *icipe*. 28 April 2021
- (2) Dr Jimmy Nsenga, University of Rwanda ACE-IOT. Operationalisation of research in Edge-Al for sustainable and scalable applied innovation, 26 May 2021
- (3) Special Edition: Women Leading in Science and Emerging Technologies: A chat with Ms Aicha Evans, CEO Zoox, hosted by Dr Fathiya Khamis, Scientist, icipe, 9 June 2021
- (4) Prof Ali Coskun, University of Freeburg, Switzerland. Tailoring Supramolecular Polymers for High-Capacity Electrodes in Lithium-ion Batteries, 30 June 2021.

1.3.1.2 RSIF PhD Student Webinars

Scientific presentations by 9 RSIF PhD students were given at three webinar events, held monthly from April - June 2021.

1.3.1.3 Cross-cutting courses

7-8 April 2021: Information Literacy Training Workshop delivered by Ms Mary Ngure (*icipe*) and five AHU librarians.

19-20 May 2021: Monitoring and Evaluation (M&E) virtual training given by Dr Michael Kiddoido (*icipe*) & Prof Robinson Musembi (University of Nairobi).

1.3.1.4 Orientation Training Workshop for Cohort 3 PhD Scholars

A virtual 5-day orientation training workshop for Cohort 3 was held on 28 June – 2 July, and included training on the RSIF PhD program, presentations by all AHUs, and training on various skills required by PhD scholars including information literacy, data analysis, proposal writing and science communications. African Host Universities and other partners attended the orientation. The workshop was opened by the Prof. Aminata Sall Diallo, Chair of the PASET EB and closing remarks from Ms. Safaa El Kogeli, from the World Bank.

1.3.1.5 Increased access to subscribed e-resources for AHU Libraries

i) Enhancing e-resources for universities and RSIF Students: AHU libraries, in consultation with the RSIF coordinators at the AHUs agreed on e-resources (e-book and e-journal collections) to subscribe to for 2021 and 2022. In total, the AHUs will gain subscription access to 45,136 e-resources (41,926 e-books and 3,210 e-journals). Of the 45,136 e-resources, 4,474 e-books and 452 e-journals will have perpetual access. Payment has been made for all the 11 AHUs. To enhance access to the e-resources, RSIF facilitated publisher trainings for AHUs as per Table 2 below:

Table 2: Publisher trainings on e-resources access

Sn.	Publisher	Insti	itution	Training date	Training language	
1.			University of Ghana			
	(Elsevier)	2.	University of Nairobi		English	
		3.	The Nelson Mandela African Institution of Science and Technology (NM-AIST)	7 th May 2021		
		4.	University of Rwanda			
		5.	Sokoine University of Agriculture	1		
		6.	University of Gaston Berger	15 th June 2021	French	
2.	Emerald	1.	Bayero University, Kano	15 th June 2021	English	
3.	Springer Nature	1.	University of Felix Houphouet - Boigny	22 nd June 2021	French	
			Kenyatta University			
			Bayero University, Kano			
			University of Port Harcourt	29 th June 2021	English	
		4.	African University of Science and	1		
			Technology (AUST)			

<u>ii)</u> strengthening skills for accessing e-resources: An RSIF Information Literacy and Reference Management training workshop was conducted on 7-8 April 2021. The workshop was designed to help researchers, including PhD students and supervisors, acquire intellectual, critical and logical skills to determine needed information; access or locate that information fast; evaluate the information; and use effectively and efficiently the retrieved information. There were 134 participants on day 1 and 109 on day 2 with participation from all AHUs.

1.4 Capacity development for the operation and management of innovation grants

1.4.1 Implementation Status of RSIF Innovation Grants

As highlighted in the last quarter, Innovation grants Type 1 (Institutional Innovation Capacity Building Program Grant) project teams continue to progress in activity implementation towards strengthening their institutional innovation ecosystems and commercializing their research products. Project teams were able to; (i) advance in the review of institutional policies on innovation, Intellectual property right management and technology transfer process for their universities; (ii) conduct training workshops and guest lectures on innovation, entrepreneurship and research commercialization; (iii) advance in processes for developing short courses on innovation and entrepreneurship; and (iv) conduct stakeholder mapping and networking visits to industry stakeholders for establishment of partnerships. Similarly, innovation projects funded under Cooperability Grants have initiated processes for laboratory and field work to improve their prototypes and produce minimum viable products.

1.4.2 Mozambique contribution to RSIF for award of research and innovation grants

The RCU continues to discuss with the government of Mozambique contribution to the RSIF windows 2&3 through the World Bank funded project on "Improvement of Skills Development in Mozambique" (MozSKills). Two meetings were held to facilitate the implementation of this agreement: i) a meeting was held with the Ministry of Science, Technology and Higher Education held on 30 June to discuss the workplan; and ii) a consultation meeting was held with higher education institutions (over 360

registered for the event) in Mozambique to provide information on the upcoming grants and other information.

1.4.3 Accelerating inclusive green growth through Agri-based digital innovation in West Africa (AGriDI Project)

As highlighted earlier, *icipe* has won a 4-year EUR 4.2million grant from the European Union, ACP Innovation Fund to enhance inclusive green growth through Agri-based digital innovations especially for women and youth farmers in Western Africa. The grants will be implemented under the Windows 2&3 of RSIF through up to 12 grants of up to EUR 300,000 to eligible institutions comprising academics and other scientists, innovators, policy makers, small business owners and other private sector actors and farmers in ECOWAS eligible countries. During the period, *icipe* prepared the first year workplan, and updated the logical framework for the Project. The 1st Call for Proposal closed on 30 June, and over 140 proposals were received in response to the Call. The proposals will be screened by *icipe* and evaluation done by external reviewers during the next period.

1.4.4 Grantees Technical Assistance Implementation Plan

icipe continues to support the grantees establish strategic partnerships with industry and academic partners to collaborate in the implementation of project activities, additionally, a business incubation workshop will be delivered in the next quarter to guide Cooperability grantees to develop route to market business plans.

Component 2: PhD Scholarships and Research Grants

2.1 Training of Doctoral Students

PhD Scholars in Cohorts 1 & 2 have progressed in their PhD studies despite the Covid-19 challenges while 102 Scholarships have been awarded for Cohort 3 (Table 3). This brings total number of students awarded to 184 from over 20 African countries, with funding from eight contributing African countries. Of these, 71 (38.8%) are women.

Table 3: RSIF PhD Scholars by country and cohorts

Year	No. of PhD scholarships	African governments funding RSIF	Breakdown of PhD recipients (countries and no. of recipients for each)	Percentage of scholars that are women	No of AHUs
2018	15	Kenya, Rwanda	Benin 1, Ghana 1, Côte d'Ivoire 1, Kenya 5, Nigeria 1, Rwanda 4, Senegal 1, Tanzania 1	20%	4
2019	-		-	-	11
2020	67	Benin, Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Rwanda, Senegal	Benin 4, Burkina Faso 3, Cameroon 4, Chad 2, Congo 1, Côte d'Ivoire 4, Ethiopia 2, Ghana 11, Kenya 12, Malawi 1, Nigeria 4, Rwanda 8, Senegal 3, Sudan 1, Tanzania 3, Uganda 2, Zimbabwe 2	40.3%	11
2021	102	Benin, Burkina Faso, Côte d'Ivoire, Ghana, Nigeria, Rwanda, Senegal	Benin 8; Burundi 2; Burkina Faso 2; Côte d'Ivoire 5; Ghana 9; Nigeria 22; Rwanda 8; Senegal 2; Cameroon 3; Chad 1; DRC 3; Ethiopia 8; Kenya 8; Malawi 2; Mali 1; Niger 2; South Sudan 1; Sudan 1; Tanzania 7; Togo 1; Uganda 4; Zimbabwe 3	39.8%	11
Total	184	8	184	38.79%	11

2.1.2 Status of Cohort 1 RSIF PhD Scholars

12 of the 15 of Cohort-1 scholars are currently on sandwich attachment at International Partner Institutes and are expected to complete their sandwich programs in the course of the year. To date Cohort 1 have published 29 peer-reviewed and conference papers, while Cohort 2 have published 18 papers (Table 4). Of these, 11 papers were authored by females and 36 by males. See Annex 1 for more details.

Table 4: RSIF Scholars publications (2018 - June 2021)*

The	Thematic area Ge		2018	2019	2020	2021*	Total	Thematic total
1.	Climate change	Female	-	-	2	1	3	11
		Male	-	2	1	5	8	
2.	Energy including Renewables	Female	-	-	-	-	1	2
	Reflewables	Male	-	-	1	2	3	3
3.	Food security and Agribusiness	Female	-	-	1	-	1	12
	Agribusiness	Male	-	1	9	2	12	13
4.	Minerals, Mining and Materials Engineering	Female	-	-	-	2	2	11
	Materials Engineering	Male	-	1	5	3	9	11
5.	. ICTs including Big Data and Artificial Intelligence	Female	-	4	-	1	5	9
	and / witherar intelligence	Male	-	1	2	1	4	9
Total		0	9	21	17		47	

^{*}All works are uploaded on RSIF Repository: https://repository.rsif-paset.org

2.1.3 Current Status of the Cohort 2 RSIF PhD Scholars

61 Cohort 2 scholars are currently in their AHUs completing their proposal writing and conducting their research. Two of the scholars have not reported and follow up is being made to provide the required support. One scholar who had deferred reported to their AHU in June while the other one who had deferred will report in November 2021. So far 30 scholars have successfully defended their PhD proposal while the others are in the process of completion of proposal writing. Students that have successfully defended their proposals are at the initial stages of data collection. Some of the students will be collecting data from their home countries while others will collect data in their host countries. All the students that are required to take mandatory coursework for their PhDs have completed at least 50% of the coursework. The students have attended four RSIF training courses on average and attended five student webinars. To date 30 Cohort 2 scholars have been matched and are to travel to the IPIs from September 2021.

2.1.4 Selection of Cohort-3 of PhD Scholars

The process for selection of the Cohort 3 of RSIF PhD scholars was approved by the PASET EB in 2020. 2577 application were received. *icipe* screened all applications to ensure eligibility to the competition and completeness of the application, and to check for plagiarism. After screening, 2,202 applications [representing 40 African nationalities, 378 women (17%), and 857 faculty (39%)] were sent to AHUs for pre-admission review. Each university shortlisted up to 25 eligible candidates using university-specific admission criteria. The AHUs shortlisted a total of 253 applications. Shortlisted candidates were requested to complete a one-way video interview, based on specific questions provided by *icipe*. 208 candidates completed the online interview video. Technical desk review of the 208 applications was then undertaken by two or three independent thematic area experts. In total, 57 technical experts reviewed the 208 applications shortlisted by the AHUs. An Independent Evaluation Committee (IEC) met online on 31st March 2021 and recommended 102 candidates for consideration by the PASET EB for the award of RSIF PhD scholarships. These candidates comprise 44 women, 48 university faculty, and represent 22 nationalities in sub-Saharan Africa (10 Francophone and 12 Anglophone). The PASET EB

approved the selection on 2 June 2021. From the list of 102 scholars that were recommended for the scholarship, eight declined the opportunity and these slots were rolled over to eight scholars that were in the reserve list.

Of these 102 successful applicants, 21 of them are funded by the Nigerian Government. The Subsidiary Agreement between the Nigerian Government and *icipe* has not yet been signed by Nigeria and scholarship contracts could not be concluded for these students.

For Cohort 3, Four students have reported to NM-AIST and seven have reported to the University of Ghana. Sokoine University of Agriculture, University of Nairobi, African University of Science and Technology and University of Port Harcourt will be receiving students in the month of July. Bayero University and University of Rwanda will receive students in the month of September. Kenyatta University, University of Gaston Berger and University of Felix Houphouet-Boigny are in talks with their respective administrations on the most appropriate reporting dates for our students. Online registration continues for students not immediately travelling physically.

2.2 Research Grants

2.2.1 Implementation status of Research Grants (Window 2, Type 1)

Research grants project teams continue to implement field work activities for data collection and laboratory experiments, undertake renovations of laboratory facilities to facilitate research activities, conduct stakeholder mapping and networking visits with private sector and other relevant actors and held team meetings on student co-supervision with project partners.

2.2.2 Second Call for award of Research and Innovation Grants

The 2nd Call for award of remaining four (4) research and three (3) innovation grants was published on March 26, 2021 and closed on June 6, 2021 having extended the deadline from May 31, 2021. A total of 43 proposals were received for both Calls of which 34 met the eligibility requirements for the Call. A total of seven (7) proposals were received for the Cooperability Grants and 36 for Research Grants of which five (5) and 29 respectively were eligible to progress for independent expert review. Eligible proposals are currently under review by a team of independent expert reviewers selected from a database maintained by *icipe*. The timelines for selection and award of the grants are highlighted in Table 5 below.

Table 5: Timelines for selection and award of the 2nd Call for RSIF Grants

No	Activity	Timelines	Comments
1.	Call for Proposals published	March 26, 2021	Done
2.	Information Webinars	April 28 th and 29 th 2021	Done
3.	Call for Proposals close	May 31, 2021 (Extended to June 6, 2021)	Done
4.	Eligibility Screening by RCU completed by	June 17, 2021	Done
5.	Evaluation by GITC completed by	August 20, 2021	
6.	GITC report for PASET EB approval	August 31,2021	
7.	Formal contracting completed by	November 30, 2021	

Request to the EB: The EB is requested to note progress of the RSIF PhD scholars and progress in implementation of the Research and Innovation grants. In particular, the EB is requested to note that 21 Scholar agreements await signature of Subsidiary agreement between Nigeria and icipe.

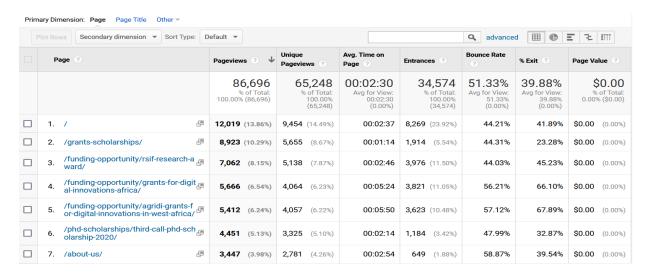
C. Cross-cutting activities

3.2. RSIF communications

RSIF's visibility and engagement continues to grow, guided by RSIF's Communications Strategy. For example, in addition to a functional website, RSIF's statistics on social media platforms such as Twitter, Facebook, LinkedIn, Instagram and YouTube continued to grow (with 1124, 1594, 377, 112 and 145 followers respectively). Following more consistent posting linked to the strategic campaigns, and the weekly RSIF newsletters (8,908 subscribers), engagement is up significantly. Since January, a total of 28 issues of the RSIF weekly have been released. Engagement is up significantly (Fig 1& 2) and continues to grow. The announcement for Cohort 3 students was widely reported and used as a teaser to prepare for announcement of Cohort 4 calls for PhD. RSIF cohort one student blogs have also been produced and shared on the website, a publication of the same is being prepared.

Fig 1: RSIF Social Media engagement Jan-Jun 2021





Request to the EB: The EB is requested to note progress on communications.

3.3 Monitoring and Evaluation

Project monitoring and evaluation activities during this reporting period included the continuous engagement of key partners of the Agri-based Digital Innovation in West Africa (AGriDI) project in reviewing and revising the project logical framework. The framework was again presented to a bigger group of project stakeholders, during project inception meeting, and a final draft was submitted to Organisation of African, Caribbean, and Pacific States (OACPS). In addition, the project stakeholder satisfaction report was shared during stakeholder consultations with RSIF PhD students, RSIF coordinators in AHUs and representative of the IPIs. The consultation meetings sought for feedback to the satisfaction survey and later set the background for the proceeding Mid-Term Review exercise. The project facilitated the second on-line technical monitoring and evaluation course for RSIF PhD students. The two-day course attracted an average of 60 RSIF PhD students on each day. As a practice, the facilitators of the project included the project Monitoring and Evaluation Officer and tutors from the AHUs to further build M&E capacity of the AHUs. The project monitoring and evaluation continued to collect and collate project outputs and activities information in regard to the project periodic workplan.

3.4 Safeguards and RSIF Grievance Redress Mechanism (GRM)

The RCU has operationalised the RSIF Grievance Redress Mechanism (GRM). The following has been achieved to date: (i) Safeguarding training course was completed in the previous period for 18 GRM representatives/focal points from African Host Universities and *icipe*; (ii) the RSIF GRM manual is completed revised and updated. The document will continue to be refined as implementation continues; (iii) a Draft RSIF Sexual and Gender Based Violence (SGBV) policy has been prepared and is under review; (iv) a Draft Safeguarding Dissemination and Communication Strategy has been prepared and is under review. These will also be synergized with the RSIF communication strategy and functionality included on the RSIF website to enable reporting. Five grievances from scholars have been received to date, three, related to inadequate support to mental health issues and payment of quarterly stipends, have been resolved. Two, related to the research funds, are in process. These are included in the grievance log. There are general grievances from the 21 cohort III scholars that are funded by the Nigerian Government contribution since they have not received their contracts. This is a matter that is in the process of being resolved.

3.5 Procurement

A total of thirty four (34) procurement activities have been undertaken for the period between January 2019 to June 2021. Out of thirty four (34) activities eighteen (18) are complete in terms of goods or service delivered, ten (10) activities are ongoing meaning that consultancies are still in progress and goods not delivered, three (3) activities were cancelled due to change in scope of service or goods specifications and one (1) consultancy was terminated. One (1) procurement activity at contracting stage and the other at bid evaluation stage (Annex 2).

3.6 Key challenges during the period

The key challenge continues to be the impact of COVID-19 on the program, particularly the continuing restrictions on face-to-face courses, supervision and training at many universities and the inpredictability in regulations for travel and international mobility. Other key challenges are: i) the quality of technical and financial reporting of universities to the RSIF grants need to be improved. Icipe is working with universities to provide training and 'hand-holding' to university teams; and ii) the delay in signing agreement between *icipe* and Government of Nigeria is delaying the signing of agreements fo the 21 scholars directly affected by this agreement.

3.7 RSIF Funds Allocation Report -Government Contributions (30th June 2021)*

INCOME	Recipient	Description	Total
B8501G00001	icipe	Fund Balance received from AAU	3,413,977
B8501G00001	icipe	Funds received from Ivorian Govt	1,033,497
B8501G00001	icipe	Signed Agreement - Govt of Ghana	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Burkina Faso	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Senegal	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Benin	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Mozambique	4,000,000
	Total Income		16,447,474

^{*} Please <u>click here</u> to view the full performance report for the period.

3.8 Key activities for the next quarter

Key RSIF activities for the next quarter are:

- a) Finalise and publish ToRs for experts to facilitate the establishment of the Permanent Fund.
- b) Follow up with countries on contribution to the RSIF General fund.
- c) Preparation for the RSIF Annual General Meeting.
- d) Finalise the Third RSIF AHU Selection.
- e) Onboarding of RSIF Cohort 3 Scholars.
- f) Preparation of the Call for RSIF Cohort 4 Scholars.
- g) Implementation of the Capacity Buildling Strategy.
- h) Advance in the selection and award of the 2nd Call for RSIF research and innovation grants and publish Call for the Mozambique.
- i) Continue implementation of the various activities proposed in the Grantees Technical Assistance Plan.
- j) Branding for RSIF and boosting communications.





3.7 RSIF Funds allocation Report - Government Contributions (as of 30 June, 2021)

					Côte						
INCOME		Notes	Kenya	Rwanda	d'Ivoire	Ghana	Burkina Faso	Senegal	Benin	Mozambique	TOTAL
Funds received or per signed	d										
agreement		Α	1,979,177	1,963,292	1,033,497	2,000,000	2,000,000	2,000,000	2,000,000	4,000,000	16,975,966
Loss , AALL Admin sharges		В	121 105	120 207							261 402
Less: AAU Admin charges Funds available for		C =A-	131,105	130,387	-	_	-	-	-	-	261,492
		-	1 040 073	1 922 005	1 022 407	2 000 000	2 000 000	2 000 000	2 000 000	4 000 000	16 714 474
Scholarships		В	1,848,072	1,832,905	1,033,497	2,000,000	2,000,000	2,000,000	2,000,000	4,000,000	16,714,474
Scholarship Cost per			100.000	100.000	100.000	100.000	100,000	100.000	100 000	100 000	
student (4 years) Number of Scholarships		E	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Available		F=C/E	18	18	10	20	20	20	20	40	166
		. 6,2		10			20				200
Allocation of Scholarships											
80% to Nationals	80%	G	15	15	8	16	16	16	16	32	134
20% to Non Nationals	20%	Н	3	3	2	4	4	4	4	8	32
Scholarships Awarded											
Nationals	74%	1	14	10	4	9	1	3	2	-	43
Non Nationals	26%	J	5	3	2	2	4	-	1	-	17
Scholarships to Award											
Nationals		K=G-I	-	5	4	7	15	13	14	32	44
Non Nationals		L=H-J	-	-	-	2	-	4	3	8	6
Funds spent on Scholars											
By AAU		М	178,000	89,000	-	-	-	-	-	-	267,000
By Icipe		N	586,053	446,268	148,551	251,767	119,113	81,300	1,630	-	1,634,682
, ,		0=C-	,	,		,	,	,			
Fund Balance		M-N	1,084,019	1,297,637	884,946	1,748,233	1,880,887	1,918,700	1,998,370	4,000,000	14,812,792





Annex 1: RSIF Scholars publications (2018 -2021)

1. Food security and Agribusiness

- Gahamanyi, N., Song, D. G., Yoon, K. Y., Mboera, L. E. G., Matee, M. I., Mutangana, D., Amachawadi, R. G., Komba, E. V. G., & Pan, C. H. (2021). Antimicrobial Resistance Profiles, Virulence Genes, and Genetic Diversity of Thermophilic Campylobacter Species Isolated from a Layer Poultry Farm in Korea. Frontiers in Microbiology, 12, 554. https://doi.org/10.3389/fmicb.2021.622275 (Male, Cohort 1)
- 2) **Hakizimana, J. N.**, Yona, C., Kamana, O., Nauwynck, H., & Misinzo, G. (2021). African swine fever virus circulation between tanzania and neighboring countries: A systematic review and meta-analysis. In *Viruses* (Vol. 13, Issue 2, p. 306). MDPI AG. https://doi.org/10.3390/v13020306 (Male, Cohort 1)
- 3) Mabwi, H. A., Kim, E., Song, D. G., Yoon, H. S., Pan, C. H., Komba, E. V. G., Ko, G. P., & Cha, K. H. (2020). Synthetic gut microbiome: Advances and challenges. In *Computational and Structural Biotechnology Journal* (Vol. 19, pp. 363–371). Elsevier B.V. https://doi.org/10.1016/j.csbj.2020.12.029 (Male, Cohort 1)
- 4) Alhassan, H., **Abu, B. M.**, & Nkegbe, P. K. (2020). Access to Credit, Farm Productivity and Market Participation in Ghana: A Conditional Mixed Process Approach. *Margin*, *14*(2), 226–246. https://doi.org/10.1177/0973801020904490 (Male, Cohort 2)
- 5) Gahamanyi, N., Mboera, L. E. G., Matee, M. I., Mutangana, D., & Komba, E. V. G. (2020). Prevalence, Risk Factors, and Antimicrobial Resistance Profiles of Thermophilic Campylobacter Species in Humans and Animals in Sub-Saharan Africa: A Systematic Review. In *International Journal of Microbiology* (Vol. 2020). Hindawi Limited. https://doi.org/10.1155/2020/2092478 (Male, Cohort 1)
- 6) **Gahamanyi, N.,** Song, D. G., Cha, K. H., Yoon, K. Y., Mboera, L. E. G., Matee, M. I., Mutangana, D., Amachawadi, R. G., Komba, E. V. G., & Pan, C. H. (2020). Susceptibility of campylobacter strains to selected natural products and frontline antibiotics. *Antibiotics*, *9*(11), 1–14. https://doi.org/10.3390/antibiotics9110790 (Male, Cohort 1)
- 7) Waema, M. W., Misinzo, G., Kagira, J. M., Agola, E. L., & Ngowi, H. A. (2020). DNA-Detection Based Diagnostics for Taenia solium Cysticercosis in Porcine. In *Journal of Parasitology Research* (Vol. 2020). Hindawi Limited. https://doi.org/10.1155/2020/5706981 (Male, Cohort 1)
- 8) Asitik, A. J., & **Abu, B. M.** (2020). Women empowerment in agriculture and food security in Savannah Accelerated Development Authority zone of Ghana. *African Journal of Economic and Management Studies*, *11*(2), 253–270. https://doi.org/10.1108/AJEMS-03-2019-0102 (Male, Cohort 2)
- 9) **Hakizimana, J. N.**, Nyabongo, L., Ntirandekura, J. B., Yona, C., Ntakirutimana, D., Kamana, O., Nauwynck, H., & Misinzo, G. (2020). Genetic Analysis of African Swine Fever Virus From the 2018 Outbreak in South-Eastern Burundi. *Frontiers in Veterinary Science*, 7, 578474. https://doi.org/10.3389/fvets.2020.578474 (Male, Cohort 1)
- 10) Maina, S., Misinzo, G., Bakari, G., & Kim, H. Y. (2020). Human, animal and plant health benefits of glucosinolates and strategies for enhanced bioactivity: A systematic review. In *Molecules* (Vol. 25, Issue 16, p. 3682). MDPI AG. https://doi.org/10.3390/molecules25163682 (Female, Cohort 1)
- 11) Hakizimana, J. N., Kamwendo, G., Chulu, J. L. C., Kamana, O., Nauwynck, H. J., & Misinzo, G. (2020). Genetic profile of African swine fever virus responsible for the 2019 outbreak in northern Malawi. *BMC Veterinary Research*, *16*(1), 1–10. https://doi.org/10.1186/s12917-020-02536-8 (Male, Cohort 1)
- 12) Umuhozariho, M. G., Hagenimana, T., Nsabimana, P., **Sirimu, C.**, Uwobasa, N., & Uwineza, A. P. (2020). Effect of oven and freeze drying on nutritional composition of pumpkin (*Cucurbita maxima*) processed flour. *Rwanda Journal of Agricultural Sciences*, *2*(1), 33–39. https://www.ajol.info/index.php/rjeas/article/view/200843 (Male, Cohort 2)
- 13) Shao, E. R., Somi, N. P., **Kifato, E. G.**, Gunda, D. W., Kilonzo, S. B., & Nyombi, B. M. (2019). Bacterial contamination and antimicrobial susceptibility pattern of isolates from stethoscopes at a referral hospital in Tanzania. *Tanzania Medical Journal*, 30(1), 37–52. https://tmj.or.tz/index.php/tmj/article/view/288 (Male, Cohort 1)

2. Minerals, Mining and Materials Engineering

- Oyewole, D. O., Koech, R. K., Ichwani, R., Ahmed, R., Hinostroza Tamayo, J., Adeniji, S. A., Cromwell, J., Colin Ulloa, E., Oyewole, O. K., Agyei-Tuffour, B., Titova, L. v., Burnham, N. A., & Soboyejo, W. O. (2021). Annealing effects on interdiffusion in layered FA-rich perovskite solar cells. *AIP Advances*, 11(6), 065327. https://doi.org/10.1063/5.0046205 (Male, Cohort 1)
- 2) **Afolayan, D. O.**, Adetunji, A. R., Onwualu, A. P., Ogolo, O., & Amankwah, R. K. (2021). Characterization of barite reserves in Nigeria for use as weighting agent in drilling fluid. *Journal of Petroleum Exploration and Production*, 11(5), 2157–2178. https://doi.org/10.1007/s13202-021-01164-8 (Male, Cohort 1)
- 3) Moirana, R. L., Kivevele, T., Mkunda, J., Mtei, K., & Machunda, R. (2021). Trends towards Effective Analysis of Fluorinated Compounds Using Inductively Coupled Plasma Mass Spectrometry (ICP-MS). In *Journal of Analytical Methods in Chemistry* (Vol. 2021). Hindawi Limited. https://doi.org/10.1155/2021/8837315 (Female, Cohort 2)

- 4) Mahamat, A. A., **Linda Bih, N.**, Ayeni, O., Azikiwe Onwualu, P., Savastano, H., & Oluwole Soboyejo, W. (2021). Development of Sustainable and Eco-Friendly Materials from Termite Hill Soil Stabilized with Cement for Low-Cost Housing in Chad. *Buildings*, *11*(3), 86. https://doi.org/10.3390/buildings11030086 (Female, Cohort 2)
- 5) Adeniji, S. A., Cromwell, J., Oyewole, D. O., Oyelade, O. v., Koech, R. K., Sanni, D. M., Oyewole, O. K., Babatope, B., & Soboyejo, W. O. (2021). Pressure-assisted fabrication of perovskite light emitting devices. AIP Advances, 11(2), 025112. https://doi.org/10.1063/5.0035953 (Male, Cohort 1)
- 6) Bello, A; Sanni, D M; Adeniji, S A; Anye, V; Orisekeh, K; Kigozi, M; Koech, R. K. (2020) Combustion synthesis of battery-type positive electrodes for robust aqueous hybrid supercapacitor. *Journal of Energy Storage*, 27(2), 101160 https://doi.org/10.1016/j.est.2019.101160 (Male, Cohort 1)
- 7) Oyewole, O., Oyewole, D., Oyelade, O., Adeniji, S., **Koech, R. K.**, Asare, J., Agyei-Tuffour, B., & Soboyejo, W. (2020). Failure of Stretchable Organic Solar Cells under Monotonic and Cyclic Loading. *Macromolecular Materials and Engineering*, 305(11), 2000369. https://doi.org/10.1002/mame.202000369 (Male, Cohort 1)
- 8) Sanni, D. M., Ntsoenzok, E., Saintaimé, E., Adeniji, S. A., Oyelade, O. V., **Koech, R. K.**, Amune, D. I., Bello, A. (2020) The role of hafnium acetylacetonate buffer layer on the performance of lead halide perovskite solar cells derived from dehydrated lead acetate as Pb source (*AIP Advances*, 2020) https://doi.org/10.1063/5.0012646 (Male, Cohort 1)
- 9) Komadja, G. C., Pradhan, S. P., Roul, A. R., Adebayo, B., **Habinshuti, J. B.**, Glodji, L. A., & Onwualu, A. P. (2020). Assessment of stability of a Himalayan road cut slope with varying degrees of weathering: A finite-element-model-based approach. *Heliyon*, *6*(11), e05297. https://doi.org/10.1016/j.heliyon.2020.e05297 (Male, Cohort 1)
- 10) Mukiza, J., Habarurema, G., Gerber, T. I. A., Hosten, E., Nkuranga, J. B., **Habinshuti, J. B.**, & Betz, R. (2020). Simultaneous cyclisation and coordination of dithizone to the fac-[Re(CO)3]+ core. *Inorganic Chemistry Communications*, 113, 107804. https://doi.org/10.1016/j.inoche.2020.107804 (Male, Cohort 1)
- 11) **Koech, R. K.**, Kigozi, M., Bello, A., Onwualu, P. A., & Soboyejo, W. O. (2019). Recent advances in solar energy harvesting materials with particular emphasis on photovoltaic materials. *IEEE PES/IAS PowerAfrica Conference: Power Economics and Energy Innovation in Africa, PowerAfrica 2019*, 627–632. https://doi.org/10.1109/PowerAfrica.2019.8928859 (Male, Cohort 1)

3. Climate Change

- 1) Gebresamuel, G., **Abrha, H.**, Hagos, H., Elias, E., & Haile, M. (2021). Empirical modeling of the impact of climate change on altitudinal shift of major cereal crops in South Tigray, Northern Ethiopia. *Journal of Crop Improvement*, 1–24. https://doi.org/10.1080/15427528.2021.1931608 (Male, Cohort 2)
- 2) Noulèkoun, F., Birhane, E., Kassa, H., Berhe, A., Gebremichael, Z. M., Adem, N. M., Syoum, Y., Mengistu, T., Lemma, B., Hagazi, N., **Abrha, H.**, Rannestad, M. M., & Mensah, S. (2021). Grazing exclosures increase soil organic carbon stock at a rate greater than "4 per 1000" per year across agricultural landscapes in Northern Ethiopia. *Science of the Total Environment*, 782, 146821. https://doi.org/10.1016/j.scitotenv.2021.146821 (Male, Cohort 2)
- 3) Blomme, G., **Dusingizimana**, P., Ntamwira, J., Kearsley, E., Gaidashova, S., Rietveld, A., van Schagen, B., & Ocimati, W. (2021). Comparing effectiveness, cost- and time-efficiency of control options for Xanthomonas wilt of banana under Rwandan agro-ecological conditions. *European Journal of Plant Pathology*, *160*(2), 487–501. https://doi.org/10.1007/s10658-021-02258-z (Female, Cohort 2)
- 4) Yisehak, B., Shiferaw, H., **Abrha, H.**, Gebremedhin, A., Hagos, H., Adhana, K., & Bezabh, T. (2021). Spatio-temporal characteristics of meteorological drought under changing climate in semi-arid region of northern Ethiopia. *Environmental Systems Research*, 10(1), 21. https://doi.org/10.1186/s40068-021-00226-4 (Male, Cohort 2)
- 5) Noulèkoun, F., Birhane, E., Mensah, S., Kassa, H., Berhe, A., Gebremichael, Z. M., Adem, N. M., Seyoum, Y., Mengistu, T., Lemma, B., Hagazi, N., & **Abrha, H.** (2021). Structural diversity consistently mediates species richness effects on aboveground carbon along altitudinal gradients in northern Ethiopian grazing exclosures. *Science of the Total Environment*, 776, 145838. https://doi.org/10.1016/j.scitotenv.2021.145838 (Male, Cohort 2)
- Kouyate, Z., Dao, K. M., Togola, O., Malle, A. K., Malle, O., Diakite, K., & Traore, A. (2021). Cowpea Seed Innovation Platform: A Hope for Small Seed Producers in Mali. In Enhancing Smallholder Farmers' Access to Seed of Improved Legume Varieties Through Multi-stakeholder Platforms (pp. 143–156). Springer Singapore. https://doi.org/10.1007/978-981-15-8014-7 10 (Male, Cohort 1)
- 7) Sharma, K., Kreuze, J., Abdurahman, A., Parker, M., **Nduwayezu, A.**, & Rukundo, P. (2021). Molecular diversity and pathogenicity of ralstonia solanacearum species complex associated with bacterial wilt of potato in Rwanda. In *Plant Disease* (Vol. 105, Issue 4, pp. 770–779). American Phytopathological Society. https://doi.org/10.1094/PDIS-04-20-0851-RE (Male, Cohort 2)
- 8) Souleymane, S., Brahima, C., Tchoa, K., Seydou, T., **Adjata, K.**, Daouda, K., & Michel, Z. (2020). Salinity Stress Effect on the Germination of Three Cereals: Maize (Zea mays), Millet (Pennisetum glaucum) and Rice (Oriza sativa).

- International Journal of Plant & Soil Science, 69–78. https://doi.org/10.9734/ijpss/2020/v32i430273 (Female, Cohort 2)
- Pi Rietveld, A.M., Dusingizimana, P., Blomme, G., Gaidashova, S.V., Ocimati, W., Ntamwira, J. (2020). A superior technology to control Banana Xanthomonas Wilt (BXW) in Rwanda. RTB Research Brief 03. Lima, Peru: CGIAR Research Program on Roots, Tubers and Bananas. 6 p. https://cgspace.cgiar.org/handle/10568/110019 (Female, Cohort 2)
- 10) Sodedji, F. A. K., Agbahoungba, S., Nguetta, S. P. A., Agoyi, E. E., Ayenan, M. A. T., Sossou, S. H., Mamadou, C., Assogbadjo, A. E., & Kone, D. (2019). Resistance to legume pod borer (Maruca vitrata Fabricius) in cowpea: genetic advances, challenges, and future prospects. In *Journal of Crop Improvement* (Vol. 34, Issue 2, pp. 238–267). Taylor and Francis Inc. https://doi.org/10.1080/15427528.2019.1680471 (Male, Cohort 1)
- 11) Ayenan, M. A. T., Danquah, A., Hanson, P., Ampomah-Dwamena, C., **Sodedji, F. A. K.**, Asante, I. K., & Danquah, E. Y. (2019). Accelerating Breeding for Heat Tolerance in Tomato (Solanum lycopersicum L.): An integrated approach. In *Agronomy* (Vol. 9, Issue 11, p. 720). MDPI AG. https://doi.org/10.3390/agronomy9110720 (Male, Cohort 1)

4. Energy including Renewables

- 1) **Obila, J. O.**, Lei, H., Ayieta, E. O., Ogacho, A. A., Aduda, B. O., & Wang, F. (2021). Optoelectronic property refinement of FASnI3 films for photovoltaic application. *Materials Letters*, *300*, 130099. https://doi.org/10.1016/j.matlet.2021.130099 (Male, Cohort 2)
- 2) **Obila, J. O.,** Lei, H., Ayieta, E. O., Ogacho, A. A., Aduda, B. O., & Wang, F. (2021). Improving the efficiency and stability of tin-based perovskite solar cells using anilinium hypophosphite additive. *New Journal of Chemistry*, 45(18), 8092–8100. https://doi.org/10.1039/d1nj00602a (Male, Cohort 2)
- 3) Nyantakyi, E. K., **Mohammed, S.**; Anumah, P.; Borkloe, J.; Morgan, A. (2020) Investigation of hydrocarbon generation potential of OML 64 in Warri State, Nigeria. *Journal of Applied Geochemistry*; 22(2/3), 192-201 https://www.proquest.com/docview/2490729566 (Male, Cohort 2)

5. ICTs including Big Data and Artificial Intelligence

- F. Thiam, M. Mbaye and A. M. Wyglinski, "Generic Reliability Analysis Model of IoT: Agriculture use case," 2021
 IEEE 93rd Vehicular Technology Conference (VTC2021-Spring), 2021, pp. 1-5. https://doi.org/10.1109/vtc2021-spring51267.2021.9448791 (Female, Cohort 1)
- 2. **E. Nizeyimana**, D. Hanyurwimfura, R. Shibasaki and J. Nsenga, "Design of a Decentralized and Predictive Real-Time Framework for Air Pollution Spikes Monitoring," 2021 IEEE 6th International Conference on Cloud Computing and Big Data Analytics (ICCCBDA), 2021, pp. 501-504. https://doi.org/10.1109/ICCCBDA51879.2021.9442611 (Male, Cohort 2)
- Effah, E., & Thiare, O. (2020). Realistic Cluster-Based Energy-Efficient and Fault-Tolerant (RCEEFT) Routing Protocol for Wireless Sensor Networks (WSNs). Advances in Intelligent Systems and Computing, 1129 AISC, 320–337. https://doi.org/10.1007/978-3-030-39445-5 25 (Male, Cohort 1)
- 4. **Fidele, M.**, Damien, H., & **Eric, N.** (2020). Effect of Window Size on PAPR Reduction in 4G LTE Network Using Peak Windowing Algorithm in Presence of Non-linear HPA. 2020 IEEE 5th International Conference on Signal and Image Processing, ICSIP 2020, 1128–1133. https://doi.org/10.1109/ICSIP49896.2020.9339272 (Male, Cohort 2)
- 5. Thiam, C., & **Thiam, F.** (2019b). Energy Efficient Cloud Data Center Using Dynamic Virtual Machine Consolidation Algorithm. *Lecture Notes in Business Information Processing*, *353*, 514–525. https://doi.org/10.1007/978-3-030-20485-3 40 (Female, Cohort 1)
- Thiam, C., & Thiam, F. (2019a, October 1). Optimizing electrical energy consumption in cloud data center. 2019 3rd International Conference on Intelligent Computing in Data Sciences, ICDS 2019. https://doi.org/10.1109/ICDS47004.2019.8942232 (Female, Cohort 1)
- 7. Thiam, C., & **Thiam, F.** (2019). An Energy-Efficient VM migrations optimization in Cloud Data Centers. *IEEE AFRICON Conference*, 2019-September. https://doi.org/10.1109/AFRICON46755.2019.9133776 (Female, Cohort 1)
- Thiam, C., Thiam, F., & Mbaye, M. (2019). Optimized energy and SLA-aware virtual machine placement strategies in Cloud: Study. 5th IEEE International Smart Cities Conference, ISC2 2019, 44–49. https://doi.org/10.1109/ISC246665.2019.9071675 (Female, Cohort 1)
- Dogbe, A., Effah, E., & Annan, R. K. (2019). Global System for Mobile (GSM) Communication Based Smart-Prepaid Energy Meter Monitoring System. Research and Applications: Embedded System, 2(3). http://hbrppublication.com/OJS/index.php/RAES/article/view/1035 (Male, Cohort 1)

6. General papers (Not included in Thematic areas tally)

 Munganyinka, J. P., Thiam, F., Maina, S., Fisher, M., Skilton, R., Osiru, M., Achoka, P., & Abdulle, S. (2020). Studying Abro0061d during the COVID-19 Pandemic: The Experiences of Three African Women PhD Students. *ADVANCE Journal*, 2(2), 18065. https://doi.org/10.5399/osu/advjrnl.2.2.6 (All Female, Cohort 1)

- 2. Mohammed, S., Morgan, A., & Nyantakyi, E. (2020). On the influence of uncited publications on a researcher's h index. *Scientometrics 2020 122:3*, *122*(3), 1791–1799. https://doi.org/10.1007/S11192-020-03356-1 (Male, Cohort 2)
- 3. Mohammed, S., Nyantakyi, E. K., Morgan, A., Anumah, P., & Sarkodie-kyeremeh, J. (2020). Use of relative extra citation counts and uncited publications to enhance the discriminatory power of the h-index. *Scientometrics 2020* 126:1, 126(1), 181–199. https://doi.org/10.1007/S11192-020-03777-Y (Male, Cohort 2)
- Hausermann, H., Ferring, D., Atosona, B., Mentz, G., Amankwah, R., Chang, A., Hartfield, K., Effah, E., Asuamah, G. Y., Mansell, C., & Sastri, N. (2018). Land-grabbing, land-use transformation and social differentiation: Deconstructing "small-scale" in Ghana's recent gold rush. World Development, 108, 103–114. https://doi.org/10.1016/J.WORLDDEV.2018.03.014 (Male, Cohort 1).

Annex 2: List of RSIF Project Procurement as of June 2021

No.	Procurement activity	Status
1	Development of safeguards and grievance redress mechanism framework (Social Risk Management)	On-going until 30/09/2021
2	Individual consultant for Proposal writing workshop services	On-going until 31/12/2021
3	Procurement of a Consultant for video production for the RSIF	On- going until 31/12/2021
4	Consultancy for development and design of a Scholarships and Grants Information Management System	On-going until 15/09/2021
5	Supply and Installation of Supply, Delivery, And Installation Of Video Conferencing Equipment To The RSIF Host Universities In Kenya, Tanzania, Rwanda, And Nigeria	On-going until 30/10/2021
6	Procurement of Translation and Simultaneous Interpretation services	On going until 28/02/2023
7	Small works for office space partitioning to create a small meeting room	On going until 30/06/2021
8	Consultancy for Planning and facilitation of the first Regional Scholarship and Innovation Fund (RSIF) Annual Conference	On going until 31/12/2021
9	Short term consultancy for a Communications officer	On going until 31/08/2021
10	Procurement of Consultancy Services for design and development of a mentorship platform for the Regional Scholarship and Innovation Fund	On going until 30/11/2021
11	Consultancy Firm for Communications, Branding and Outreach for the Regional Scholarship and Innovation Fund (RSIF).	At contract signing stage
12	Consultancy to Design and Deliver a Business Incubation Workshop for Entrepreneurial Scientists Implementing RSIF Funded Innovation Projects	At bid evaluation stage